

RF AMPLIFIER

MODEL *TM5338*

Available as: TM5338, 4 Pin TO-8 (T4)
 TN5338, 4 Pin Surface Mount (SM3)
 FP5338, 4 Pin Flatpack (FP4)
 BX5338, Connectorized Housing (H1)

Features

- High Output Power: +25 dBm Typical
- Low Noise Figure: 2.7 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5-150 MHz	5-150 MHz
Gain (dB)	15	14.0 Min.
Power @ 1 dB Comp. (dBm)	+25	+23.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise Figure (dB)	2.7	3.5 Max.
Power Vdc	+12	+12 Min.
mA	88	100 Max.

Note: Care should always be taken to effectively ground the case of each unit.

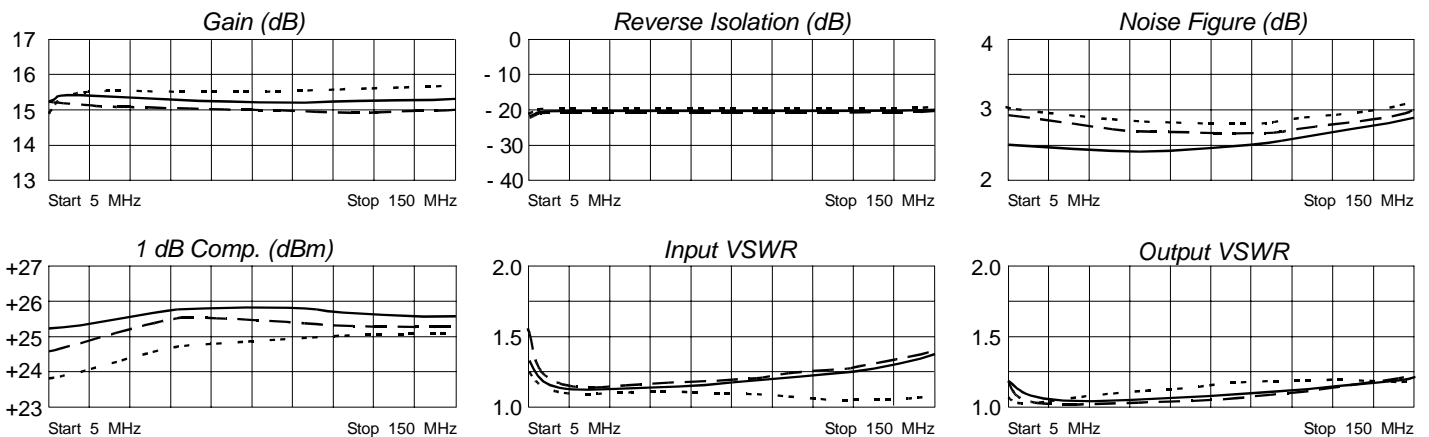
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +50 dBm (Typ.)
 Second Order Two Tone Intercept Point +44 dBm (Typ.)
 Third Order Two Tone Intercept Point +36 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 15 Volts
 Continuous RF Input Power + 18 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - - + 85 °C ······ -55 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.16	-96	5.81	-164	.09	-171	.09	-42
25	.06	-140	5.85	169	.10	167	.02	-90
50	.07	-153	5.83	154	.10	151	.02	-105
75	.07	-155	5.78	139	.10	135	.02	-116
100	.09	-162	5.78	125	.10	120	.04	-152
125	.12	-164	5.80	110	.10	105	.06	179
150	.17	-169	5.80	94	.10	89	.09	149



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 6/22/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001